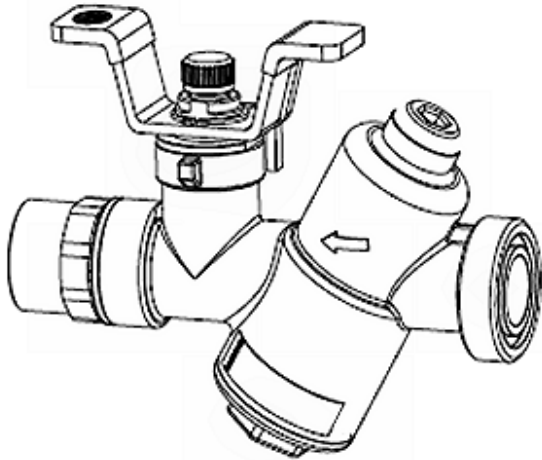


<b>JOB:</b>   <b>UNIT TAG:</b> <b>ENGINEER:</b> <b>CONTRACTOR:</b>	<b>REPRESENTATIVE:</b>   <b>ORDER NO.</b> <b>SUBMITTED BY:</b> <b>APPROVED BY:</b>	<b>DATE:</b> <b>DATE:</b> <b>DATE:</b>
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## Circuit Sentry

Model ACL  
 Combination Commissioning/Isolation Valve & Field Adjustable Automatic Flow Limiting Valve for Low Flow Applications

**DESCRIPTION**

The Bell & Gossett Model ACL Circuit Sentry™ Low Flow valve is a combination commissioning, isolation, and adjustable automatic flow limiting valve for low flow applications for use in HVAC systems. Valves are furnished with removable flow limiting diaphragm cartridge. Cartridge can be adjusted to provide flows from 0.25 GPM to 3.8 GPM without the need for different flow orifices. Valves come standard with one pressure/temperature port as well as hanging ID tag for commissioning purposes. Part numbered valves come standard with SWTF union tailpiece and additional loose pressure/temperature port and configured valves come with choice of SWTF, NPTF, and NPTM union tailpiece.

**CONSTRUCTION**

Body: Brass C37700  
 Ball: Chrome plated Brass C38500  
 O-rings: EPDM  
 Handle: Chrome Plated Steel w/ Black Vinyl

**Cartridge**

Spring: DZR Brass C35330  
 Diaphragm: HBNR  
 Orifice: PPO 20%  
 Screw: Stainless Steel

**MAXIMUM WORKING PRESSURE**

400 PSI (2758 KPa)

**TEMPERATURE RANGE**

250°F (121°C)

**FLOW RANGE**

0.25 GPM (0.015 L/s) to 3.8 GPM (0.24 L/s)

**CONTROL RANGE**

Min: See chart on page 3

Max: 60 psid

**ACCURACY**

+/-5% up to 50 psid

+/-10% between 50 psid and 60 psid

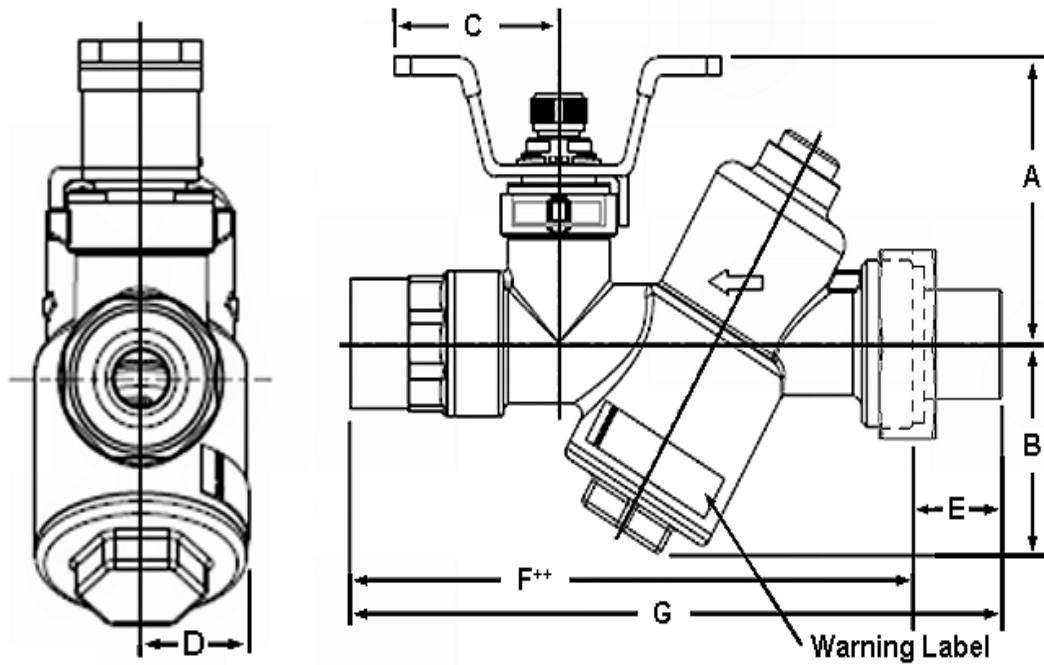
**SCHEDULE**

**PART NUMBERED VALVES**

Part Number	TAGGING INFORMATION	QUANTITY
117437		
117438		
117439		

**SCHEDULE**

VALVE FIXED END	TAGGING INFORMATION	QUANTITY
1/2" SWTF		
3/4" SWTM		
3/4" SWTF		
3/4" NPTF		



**DIMENSIONS AND WEIGHTS  
PART NUMBERED VALVES**

\*\*Indicates dimensions w/o tailpiece

Valve Fixed End	Valve Union End	DIMENSIONS* IN INCHES (mm)							Approx. Wt. lbs.(kg)
		A	B	C	D	E	F**	G	
1/2" SWTF	1/2" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.6 (15)	5.1 (129)	5.7 (145)	1.4 (0.65)
3/4" SWTM	1/2" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.6 (15)	5.1 (129)	5.7 (145)	1.4 (0.65)
3/4" SWTF	3/4" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.8 (20)	4.8 (122)	5.6 (142)	1.4 (0.65)
3/4" NTPF	3/4" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.8 (20)	4.9 (125)	5.7 (145)	1.4 (0.65)

**CONFIGURED VALVES**

Valve Fixed End	Connection Fixed End	DIMENSIONS* IN INCHES (mm)							Approx. Wt. lbs.(kg)
		A	B	C	D	E(Max)	F**	G	
1/2"	Sweat Female	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	5.1 (129)	6.6 (169)	1.55 (0.70)
3/4"	Sweat Male	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	5.1 (129)	6.6 (169)	1.55 (0.70)
3/4"	Sweat Female	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	4.8 (122)	6.4 (162)	1.55 (0.70)
3/4"	NPT Female	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	4.9 (125)	6.5 (164)	1.55 (0.70)

\*All dimensions +/- 0.125" (3.2 mm) tolerance. Dimensions are subjected to change. Not to be used for construction purposes unless certified

Note: This product is not intended for use in potable water applications.

# Differential Pressure vs. Flow

Minimum differential pressure required to maintain flow through adjustable flow cartridge.

